

ORAL HISTORY INTERVIEW

Billy Manderscheid



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Historian
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Editorial Convention

A note on editorial conventions. In the text of these interviews, information in parentheses, (), is actually on the tape. Information in brackets, [], has been added to the tape either by the editor to clarify meaning or at the request of the interviewee in order to correct, enlarge, or clarify the interview as it was originally spoken. Words have sometimes been struck out by editor or interviewee in order to clarify meaning or eliminate repetition. In the case of strikeouts, that material has been printed at 50% density to aid in reading the interviews but assuring that the struckout material is readable.

The transcriber and editor also have removed some extraneous words such as false starts and repetitions without indicating their removal. The meaning of the interview has not been changed by this editing.

While we attempt to conform to most standard academic rules of usage (see *The Chicago Manual of Style*), we do not conform to those standards in this interview for individual's titles which then would only be capitalized in the text when they are specifically used as a title connected to a name, e.g., "Secretary of the Interior Gale Norton" as opposed to "Gale Norton, the secretary of the interior;" or "Commissioner John Keys" as opposed to "the commissioner, who was John Keys at the time." The convention in the Federal government is to capitalize titles always. Likewise formal titles of acts and offices are capitalized but abbreviated usages are not, e.g., Division of Planning as opposed to "planning;" the Reclamation Projects Authorization and Adjustment Act of 1992, as opposed to "the 1992 act."

The convention with acronyms is that if they are pronounced as a word then they are treated as if they are a word. If they are spelled out by the speaker then they have a hyphen between each letter. An example is the Agency for International Development's acronym: said as a word, it appears as AID but spelled out it appears as A-I-D; another example is the acronym for State Historic Preservation Officer: SHPO when said as a word, but S-H-P-O when spelled out.

Introduction

In 1988, the Bureau of Reclamation created a History Program. While headquartered in Denver, the History Program was developed as a bureau-wide program.

One component of Reclamation's History Program is its oral history activity. The primary objectives of Reclamation's oral history activities are: preservation of historical data not normally available through Reclamation records (supplementing already available data on the whole range of Reclamation's history); making the preserved data available to researchers inside and outside Reclamation.

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For additional information about Reclamation's history program see:
www.usbr.gov/history

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**Oral History Interview
Billy Manderscheid**

Petershagen: This is George Petershagen conducting an interview with Bill Manderscheid on behalf of the Bureau of Reclamation. Today's date is September 8, 1994, and we're in the Manderscheid residence in Fair Oaks, California. This is Tape 1, Side A.

Bill, before we start with the real questions, I would ask that you would please acknowledge that we are tape recording his interview, and you have signed the Deed of Gift making this the property of the Government of the United States.

Manderscheid: I have signed it.

Petershagen: Thank you. And then we'll start with the very beginning of your life. Where and when were you born, please?

Early Life

Manderscheid: I was born in Cedardale, Oklahoma in 1932. I left Oklahoma when I was six months old with my parents and lived all of my life in the state of Washington until I joined the Navy in 1950, and left the Navy in '54, entered the University of Washington, and graduated with a degree in civil engineering in 1960.

- Petershagen: And what did you do in the Navy? What was your rating?
- Manderscheid: I was a Radarman Second Class. I worked in the Combat Information Center on two carriers on which I served. Both of them operated in the Far East and Korea and elsewhere.
- Petershagen: And where were they home ported?
- Manderscheid: In San Diego.
- Petershagen: Okay. You didn't associate yourself with a Reserve unit or anything like that?
- Manderscheid: No, I was fortunate to not have to do that. I made it under the line.
- Petershagen: What brought your folks to the state of Washington from Oklahoma?
- Manderscheid: The Depression. They had relatives in the state of Washington, and so they moved up there and made a living.
- Petershagen: This was kind of the Dust Bowl migration story?
- Manderscheid: Yes it was.
- Petershagen: So you went to the University of Washington on the G-I Bill, I assume.
- Manderscheid: Yes, that's right.

Petershagen: And when did you say you graduated?

Manderscheid: In 1960.

Petershagen: Did you have any special area of emphasis when you took your degree?

Going to work For Reclamation

Manderscheid: No, and as a graduate in civil engineering, you were only allowed a few electives. Reclamation was one of the electives that I had. It was a course on operation in the Columbia Basin Project,¹ which I enjoyed very much. But when I graduated, I wanted to work with a firm that had a construction project in the mountains—that's where I wanted to work. At that time, I was hoping to get a job with Kaiser Engineers who sensed an interest. I was interviewed and ended up with the Bureau of Reclamation working

¹ Located in east central Washington, the Columbia Basin Project (CBP) serves about 671,000 acres in portions of Grant, Lincoln, Adams, and Franklin Counties, with some northern facilities located in Douglas County. Principal project features include Grand Coulee Dam, Franklin D. Roosevelt Lake, Grand Coulee Powerplant Complex, switchyards, and a pump-generating plant. Primary irrigation facilities are the Feeder Canal, Banks Lake, the Main, West, East High, and East Low Canals, O'Sullivan Dam, Potholes Reservoir, and Potholes Canal. For more information see, Wm. Joe Simonds, "The Columbia Basin Project," Denver: Bureau of Reclamation History Program, 1998, www.usbr.gov/projects/pdf.php?id=88.

on the Trinity Project in Northern California in construction.²

Petershagen: When you say you were interested in construction "someplace in the mountains," do you mean that generically, or did you have a specific Kaiser project you were looking at?

Manderscheid: No, I meant that generically.

Petershagen: What was your first contact with the Bureau? Were there recruiters on campus?

Manderscheid: Yes. Wallace Christianson [phonetic spelling] out of Sacramento was interviewing in Seattle. I went to work for Wally later on, a very nice fellow.

Petershagen: When you went to the Trinity, what was your position there?

Trinity Division of the CVP

Manderscheid: I was on inspection, working on the fill, the Trinity Dam itself. And we inspected the fill and then various jobs related to

² A feature of the Central Valley Project, the Trinity River Division on the Trinity River is about 25 miles northwest of Redding. Surplus water from the Trinity River basin is stored, regulated, and diverted through a system of dams, reservoirs, tunnels, and powerplants into the Sacramento River for use in water-deficient areas of the Central Valley basin. For more information see, Eric A. Stene, "Trinity Division Central Valley Project," Denver: Bureau of Reclamation History Program, 1996, www.usbr.gov/projects/pdf.php?id=108.

that, and going and putting in some of the roads that were around there, they built later on, just going and laying them out, preliminary routes.

Petershagen: Were you married at that time?

Manderscheid: Yes, I was.

Petershagen: So where did you live?

Manderscheid: We lived right at Lewiston in the government camp there. We lived in a twenty-eight-foot kit trailer and my wife was pregnant. But we thought we [were] living in a great place at that time. Of course, we'd never handle it very well now, but then it was ideal for what we wanted to do.

Petershagen: And how long were you there, working on the Trinity Project?

Manderscheid: Three months, and then the Bureau started a new training program for new people, and it was a rotation program in which I was then rotated down to Sacramento. And then I rotated through various divisions in Sacramento, and ended up in planning, working for Wally Christianson, and worked on Delta.

Petershagen: About how long would you be in any one position as you went through this rotation?

Engineering Rotation Program

- Manderscheid: Three months, except in the Division of Design—I spent six months there, but I was in various branches of the Division of Design: canals, dams, developing contract construction specs [specifications]. And that was a period of six months.
- Petershagen: But as you look back on that whole period of time as you went through that whole rotation program, it sounds like you were pretty well prepared for just about any sort of a position in the Bureau. You saw a little bit of everything that the Bureau did.
- Manderscheid: Yeah, I didn't get an opportunity to work in the operations or O&M, operation and maintenance, at that time. But I think my interest was in either design and planning, and my first interest of course was construction.
- Petershagen: Now the reason you didn't get into operations, was that *your* choice, or that was just where positions were available?
- Manderscheid: Just time. We had a year's rotation assignment, and at the end of twelve months, then I was offered various positions in various places. I selected the one I wanted.
- Petershagen: And where was that?

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Manderscheid: In planning. (Petershagen: Here in Sacramento?) In Sacramento.

Petershagen: And how long were you in that?

Manderscheid: Well, the rest of my career, twenty-five years, I've been in planning.

Petershagen: Okay. What other places have you worked besides Sacramento?

Working in the Spokane Office

Manderscheid: I worked out of the Spokane Office in a couple of investigations. The first one was Puget Sound and adjacent water study, and I transferred up there in 1966-67 period. Then I was sent over to Seattle and I worked out of Seattle for nearly two years with an interagency team developing the water resource plans for the Puget Sound area. And this was twelve river basins in which Department of Interior had responsibility for six of them. The Department of Agriculture and the Corps of Engineers had responsibility for the others, and the state of Washington then worked with all of us in these assignments.

Petershagen: Was there a particular agency that was the lead agency that really had the responsibility for everything?

Manderscheid: No. The funding came through Interior, and I believe it went to the other agencies

at that time. But we had a Puget Sound Study Center, and we had a task force ahead of us. We were at the senior staff level on this assignment. Then after its completion in 1970, I think worked out of the Spokane Office in developing a water resources plan for the state of Washington and the state of Montana, in which I was co-chairman of both of those efforts.

And then I went to work on the Columbia-North Pacific States, which was a study to develop a water resources plan for the entire Columbia River drainage. And I worked on it until about 1971 or '2, and then I was assigned to the Western U.S. Water Plan to work on it. And it was about that time that the head of our office said that it's time that I got back into the main thrust of Reclamation and the divisions working, and so I was put in charge of the Engineering and Surveys Division, and held that position until 1973 when they consolidated the various Field Offices in the Northwest and I was moved down as Assistant Chief of the Boise Planning Field Office in Boise, Idaho.

Petershagen: And how long were you in Boise?

Manderscheid: I was in Boise, again, almost two years, and an assignment came up back in Sacramento in which I was selected. And that was Chief of the Water Resources

Division, which is basically hydrology and water rights. That was in 1975.

Petershagen: And then you were in Sacramento ever since, until you retired?

Manderscheid: Back in Sacramento, yes.

Returning to Sacramento

Petershagen: Was that decision made to come here for that position, or had you some desire to come back to Sacramento?

Manderscheid: The position was advertised and I put in for it and was selected. And so I was happy to come back to Sacramento. We had a lot of good friends here, and it's a good program here.

Petershagen: But just because it was located in Sacramento was not necessarily the primary reason you put in for it?

Manderscheid: No. Before we move on here, I'd like to jump back to our assignment in Sacramento which I served in planning from 1961 through '67 when I left Sacramento, and I worked in the Delta Division,³ which was an exciting time to

³ The Delta Division provides for the transport of water through the central portion of the Central Valley, including the Sacramento-San Joaquin River Delta. The main features of the division are the Delta Cross Channel, Contra Costa Canal, Tracy Pumping Plant and Delta-Mendota Canal, constructed and operated by the Bureau of

(continued...)

me of the Bureau then. We were in the process, along with the state of California to develop the State Water Project. Let me correct that. We were working with the state of California to find a way to transfer water across the Delta for the state and federal water projects. At that time the state had developed what they called a hydraulic barrier system of various dams in the Delta, closing off some channels. The Corps of Engineers had developed the barrier systems in which they were looking to build Ship's Island barrier. I came up with the peripheral canal concept which was adopted by what they called then—it was a three-agency group. And just something that just fell into place and really took off. And it wasn't that I was exceptionally bright or anything, I was just given the assignment to find a way to run water around through the Delta, and just playing around and ended up doing that.

It was a concept that was endorsed and embraced by the State Fish and Game, [U.S.] Fish and Wildlife Service, the state of California, the Corps of Engineers after a short period of time. I wrote the initial report, the feasibility report, for that assignment. I was working with Archie

3(...continued)

Reclamation. For more information see, Eric A. Stene, "Delta Division Central Valley Project," Denver: Bureau of Reclamation History Program, 1994, www.usbr.gov/projects/pdf.php?id=102.

Hansen [phonetic spelling] who headed up our branch, and there was only three of us in the branch at that time. And it was an exciting time. Everybody in Washington, D.C., and Denver, the state of California, and all of these other agencies were just very enthused about this concept, and the more we got into the engineering of it, the more exciting it became. And we ended up with a very good plan.

I left in 1966, the fall of 1966, and the final feasibility report was finished a year or so later. And whatever happened in between there, I think the environmental movement got organized and started, and the Vietnam War made money scarce, and it's still an issue today. But eventually I think they will build this canal. It is a real answer to transfer across the Delta, and it's the answer for fisheries, for flood control, and for Delta salinity. And it works with the resource and not against it.

The Peripheral Canal

Petershagen: Since you brought us to this point, let me explore the Peripheral Cana a little bit more with you. (Manderscheid: Sure.) One of the things that's kind of interesting in looking at it from the State Department of Water Resources side, is that there seems to have been an argument with regards to the canal as to whether or not it

was included in the original State Water Project, included within the bond issue and everything that financed that. Do you recall any discussions along that line as you were working on it?

Manderscheid: Not as a Peripheral Canal, it wasn't, because the original bond issue passed, I believe it was in the fall of 1960. And we didn't come up with the peripheral canal concept until 1962. And so there wasn't *anyone* out there pushing any concept like that.

At that time we had a Delta County Consulting Board, and was organized by the Bureau, and all the Delta Counties that even had parts of their counties in the Delta, served on this board, and they were the supervisors. And then the state of California Fish and Wildlife Service, Fish and Game—the State of California represented by the Department of Water Resources, State Fish and Game, Public Health Service, I believe, and there were some others, in which the Bureau more represented the Department of Interior. And then below that they had the technical committees and I worked with both of them, at both levels. And there was never anything to have a Peripheral Canal mentioned in any of those meetings, and I attended all of them up through until the time I left.

And so it could be that there was some concept of doing that, but at that time the Department of Water Resources was pushing a hydraulic barrier plan, and that was to move water through existing Delta channels and use some of the channel. They put in various dams and temporary dams and so on to move water around to get a positive flow in the Delta and so on. And that was the Department of Water Resource, state of California's concept. And I don't know any other—although they had looked at some others, there were a number of variations of that. But that was the concept they were pushing in 1960-61-62 that I'm aware of.

Petershagen: And is it fair to say that that's the principle that the Delta is operated under right now, that hydraulic barrier approach?

Manderscheid: No. (Petershagen: It's not at all?) No, the Delta is operated now under almost the same concept as it was operated in 1960, although there have been some refinements to that. And when I say "as it was in 1960," they had the Delta Cross-channel in, water came down the Sacramento, went through the Cross-channel, same way it's doing right now. Now they put in Clifton Court forebay and they've done some channel closures in the South Delta, and they operate the system a little different, but it's basically

the same physical system that was there in 1960.

Petershagen: Okay, then you said you left in the late 60s?

Manderscheid: Uh-huh, November of '66.

Petershagen: So you had developed this concept and then kind of had to go away from it, and if I can say it this way, while you were gone the thing got undermined by whatever forces, and you've identified some of those that you think contributed to it. (Manderscheid: Uh-huh.) How did that make you feel as you followed this "from a distance," so to speak?

Manderscheid: Well, the time that I was away, the Peripheral Canal was inching forward. The feasibility report had been completed and sent forward, and it was in Washington, but it was never reported out by the secretary that I'm aware of. It may have been. But in 1972, I believe it was, somewhere in there, they started the NEPA Act, National Environmental Policy Act, and that required that an environmental assessment and then an environmental report be made. And when I returned in 1975, they were still working on that, and I became engrossed in a number of other things, but I always felt that it would move forward until I believe it was the Jerry Brown administration and et al., and at the same

time, the Carter administration was in there and they were more environmentally-oriented.

I remember the campaign of 1982 when the environmental movement had big commercials out on T-V that the Delta was going to become a dry sump and all the trees and everything were going to die and the animals and birds were going to disappear and so on—very effective. And so it was turned down kind of by the populace. But I still think the Peripheral Canal is the ultimate answer and will ultimately, as water gets more serious in north *and* south, and fisheries. The Peripheral Canal is an ideal program for fisheries, and I think that if it had been built when it was going to, we wouldn't have the fishery problem that we're having now, just simply because it allowed water for fisheries. It took the pumps out of the Delta. When both of those pumps are going down there, you have a real trend in water pulling fish that way, and it confuses a lot of fish coming up, and it also inhibits the striped bass and so on. So there is problems in the Delta that could have been solved long ago with a Peripheral Canal—and still can be.

Petershagen: And these threatened environmental dangers, all the trees dying and the Delta becoming a dry sump and all that sort of

stuff, that was not part of your plan, correct?

Manderscheid: (laughs) Of course not. No, it was an effective campaign that they waged and it killed the Peripheral Canal. And so that's kind of where we're at right now.

Petershagen: During this period of roughly '67, I think, to '75, where were you then?

Manderscheid: I was in Spokane, Seattle, and Boise, Idaho.

Petershagen: So then in '75 you came back to Sacramento? (Manderscheid: That's right.) And you were here for how long?

Manderscheid: Until I retired in '85, so ten years.

Petershagen: And what positions did you hold then, during that ten-year period?

Chief of the Water Resources Branch

Manderscheid: Okay, I was Chief of the Water Resources Branch from '75 to '78, and then I was Chief of the General Investigations Branch from '78 to '82. Then I was selected as Regional Planning Officer in '82 and I was in that position, acting, for almost a year. And then I was there until '85 when I left the Bureau.

Petershagen: Explain to me a little bit what the General Investigations Branch does, will you, Bill?

Manderscheid: Yeah, the General Investigations Branch took all of the planning investigations, the core of planning, and they were the ones that were the project engineers for each project. And they you had your services branches which would be water resources, economics, geology, and so on. These branches all participated and contributed to the core study, which was any kind of study that you might have. And we had studies on, oh, of course the Delta was still alive, and transfer of water, and we had West Sacramento Canals, and we had Unit, and we had studies up in Oregon. We had forty-some programs on-going in the [Mid-Pacific] Region at that time, and General Investigations Branch was probably in charge of maybe twenty of those, about half of them. Other programs were being done like the Environmental Branch doing biological studies in the Delta, and they were funded through our program, and so on.

Petershagen: Alright, let me stop you right there and turn the tape over.

END OF SIDE A, TAPE 1.
BEGINNING OF SIDE B, TAPE 1.

Petershagen: This continues the interview of Bill Manderscheid. This is Tape 1, Side B.

Bill, you had mentioned that in conjunction with your assignments in Boise and here, you had some periodic assignments, short-term assignments, to Denver and Washington. So could you explain what you did with each of those, please?

Reclamation's Management Training Program

Manderscheid: Yes, the Bureau had on-going at that time, and may well still have the same program, but it was a program for future managers in the Bureau, Upper-Level Management Program, or something like that. And I was selected in 1973 or '4 to be on this program. And in 1974 I spent a month in Denver as a part of this program and I worked in various offices in Denver. I worked on the Western U.S. Water Plan, just in meetings and doing some of the work there, plus other assignments. And then in February of 1976 I went to Washington for five weeks. There I had various assignments in the Washington Office. I spent a week working in Congressman [Harold T.] Biz Johnson's Office, helping to write legislation in various items related to the congressman's work—answered letters and that sort of thing. And then I spent a week in what they called the . . . It was a week's school on "how Washington really

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works," quote, unquote. And that was put on by various people that work with the government.

Petershagen: Would these be government employees, or congressional staffers?

Manderscheid: No, these were people coming from the outside that would work with the congressmen, would write letters and things. And so they, in essence, gave us their side of the story on how they helped government work. And then there were congressional people there also, and then there were departmental people, all presenting portions of this schooling. And it was a very interesting time.

Petershagen: We hear this term all the time of "inside the Beltway," and "Washington mentality," and things like that. After that experience, do you think there really is such a thing?

Manderscheid: Oh, definitely. My God, yes. I don't know if this should go in a historical document, but there was a joke going around in Washington, and I can't remember exactly what it was . . . Maybe we'll just scratch this part and continue on. (Petershagen: Okay, that's fair.) But the gist of it was that the Commissioner of Reclamation—I mentioned to somebody when we were having coffee and I was working in Biz Johnson's office at the time. Well, that word got back to the

Commissioner of Reclamation and his secretary called me up and said, "Did you say that?" "Yes, I did." "Well, where did you hear that?" And I said, "Wait a minute." And the next thing I know the commissioner is calling Biz Johnson. And so "Things like that," she says, "we really try to nip these things in the bud." And it was all a joke, in essence, that I was just passing on to somebody I was having coffee with. So it taught me real quick you keep your mouth shut, and boy, rumors travel fast in Washington, I'll tell you. (Petershagen: Amazing.) "Inside the Beltway" is a term that's well-used, I think. It is a different world, different climate.

Petershagen: So you would apply that universally, across the federal government, inside the Beltway—not just the Bureau of Reclamation is different in Washington, is that correct?

Manderscheid: Yeah. The agencies back there rely on Congress for their funding and they pretty much jump at what the congressmen want and what the Executive Branch wants. They're always developing positions and supplying information to the congressmen for budget and for purposes like that. It's a totally different environment when you get back to California or any of the other states and you're working on purely engineering and related matters.

Petershagen: Now, we've talked about what you did here in Sacramento the last few years before you retired. Once you did retire, you didn't retire completely, did you?

Consulting Work

Manderscheid: No, I didn't. After I retired I went to work for a consulting firm, and the firm had a contract with the Bureau of Reclamation to work to assist the Bureau on any of the studies or designs or anything like that that they had. We were to be an extension of their staff. And I worked on these for six years after I left the Bureau. And very interesting, in that I didn't have to be involved in the politics of the office or the Bureau, but could be just involved in the technical aspects of it, providing technical information.

Petershagen: But were you working physically with Bureau people?

Manderscheid: With and for, yes.

Petershagen: So you could still see the office politics and policy changes and all that sort of thing going around you.

Manderscheid: Yes. Yeah, it has a real effect on the staff, all the policy changes. There hasn't been too much positive for the Bureau in the overall aspect of having a program and using it, developing it, to do the things that the Bureau was set up to do.

That has long disappeared and there seems to be just a monitoring and holding the responsibilities that the Bureau has intact and keeping them afloat and going and moving forward while Congress and the Washington Office chip away at portions of it.

Petershagen: Do you remember when you first might have noticed this change in the Bureau, going to that style of operation?

Reclamation's Mission Transformed

Manderscheid: I'm not quite sure what you mean.

Petershagen: Well, when you say that it's now largely kind of a monetary and policy function, and when did it become less exciting?

Manderscheid: Oh, I think probably in the late 70s, probably with the Carter administration when they had people in Interior, deputy secretaries that were really environmental people, and their agenda was not to help fulfill the requirements of the Reclamation Act, or the program that the Bureau was on, which in their minds was to more even it up for the people versus the landowners. And I had no problem with that. But at that point in time, it seems to me, is where the Bureau shift began away from doing what was requested of them, and becoming more . . . fighting fires and building a line of defense, rather than going out and

developing land and projects and that sort of thing—even developing fishery projects and things that the Bureau did.

Petershagen: A lot of that kind of policy is, of course, determined by the politicians, and are really public decisions. But I wonder if, in your mind, are there ways that maybe the Bureau could become more proactive?

Problems with Reclamation Policy

Manderscheid: Well, see, the problem in my mind is that you have two things: you have a congressional law requirement that authorized projects, and when they authorized projects, they authorized them to operate in a certain way. And there is administrative procedures and requirements to back up these laws. And so when somebody just stands up at a meeting and the press is there and they say—we can just take Folsom [Dam]⁴ as an example, in the flood of 1986. The environmentalists stood up and said, "You know, you got to re-operate Folsom more for flood control, because that's what it was built for." Well, through the years, Folsom had been operated for flood control, water supply, and recreation.

⁴ Folsom Dam was constructed by the Corps of Engineers and completed in May 1956. Upon completion, the dam was transferred to the Bureau of Reclamation and became a part of the Central Valley Project. Sitting on the American River 23 miles northeast of Sacramento, Folsom Dam is 340 feet high with a crest length of 1,400 feet.

They held the pool up there in the summer, through most of the summer for recreation. They had more recreation in the 60s, I remember, something like a million-and-a-half visitor days, at *that* time, and so quite a bit more.

Well, all of a sudden you have to operate differently, and the staff can't do that. They can't turn on a dime and do it. They got to have backup requirements, they got to have administrative changes, they got to have legal, and we have lawyers and they tell us what we can do and what we can't do when you get into these tight places. But at the same time, when you go to a meeting with the public, and they say, "Why *can't* you do it? All it does is require you to do this and that." And the staff just cannot do that. And lately it's been under the guidance of the lawyers, the Secretary's Office, and they're calling the shots. And guys like Roger Patterson⁵ have a hard time trying to satisfy both the public here, and the congressional and the Secretary's Office.

5 Roger Patterson served as regional director in Reclamation's Great Plains Region from 1989 to 1991 and became the Mid-Pacific's regional director from 1991 to 1999. Mr. Patterson also participated in Reclamation's oral history project. See, Roger K. Patterson, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation oral history interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1994 to 2000, in Sacramento, California, and Lincoln, Nebraska, edited by Brit Allan Storey, 2011, www.usbr.gov/history/oralhist.html.

You got to balance them all, and it takes a good man to do that. In the old days—and I won't say those were the best days—but in the old days, the Commissioner of Reclamation and most of the congressmen on the Interior committees that provide funding, they supported the Reclamation program, and they wouldn't listen to environmental people and others, and they did what they thought they should do, interpreting the law and the budgets and so on.

Petershagen: Now, someplace in your travels you also went to China, correct?

Travels to China

Manderscheid: Yes.

Petershagen: And what was that all about?

Manderscheid: After Nixon opened up the meeting with the Chinese and the China continent to westerners—and that was in '72—there were various meetings with the Chinese Government. They would send technical people over here, we would send technical people over there. And by 1980, there was a number of evaluations of river basins going on in China by various agencies within the U.S.: the Corp of Engineers went over, and Reclamation. Well, Reclamation didn't go over until this trip, and at that time, it was a China Government-sponsored trip

in which ten people from the U.S. were allowed to go on this trip, and eight of them were from the Bureau of Reclamation and two were from outside of Reclamation, but in the engineering sector one of them was a navigation expert, and another one was a geologist.

So I was selected to represent planning. We went to China and spent six weeks evaluating the Yangtze River, the Three Gorge Dam, and evaluating the studies that were done, recommending different approaches or whatever. And it was a very interesting trip and the Chinese Government was very interested in what we had to say.

Petershagen: The reason I plugged that question in here is, did a potential construction project like that put some of the fun and excitement back into this business that I think may have been missing for you at that time?

Manderscheid: Well, yes, but in a totally different context. Yes, one of my career goals which I never met was to travel abroad and work on foreign assignments. Anyway, I didn't get to do that, so this was an opportunity to do that, and it opened up my eyes to a lot of things that are going on in third world countries. The whole system over there on the Yangtze is so much larger and bigger than anything we have here in this country. Just the size of the river itself and the

damages and potential damages that are there in flood seasons is just truly remarkable, how they've maintained them over the years.

And then they were going to build this dam, which was going to be the largest dam in the world, and hold back more water, flood more cities than just about anywhere. And it was a real interesting assignment. What they had at that time was like our secretary of interior, was a woman that was in charge of water resources. And then there was one in charge of power. And one of our recommendations was that power and water resources should be combined, and after we left they were combined.

One of the things that we were there, they kept asking us for meetings, and this woman that was in charge of the water resources, she requested a meeting with us in which each of us would make a five-to ten-minute presentation, and then answer her questions. She said, "There will be nobody here but the interpreter and myself, and so you're free to say whatever you want to say." And so we said a number of things, and we recommended how they need to change their procedures, and one of them being the environmental person that we had suggested that they had two offices that were cross-purposes and they had too many people on them, and that maybe

they ought to look at combining them or getting rid . . . Well, the very next day they just wiped one clear off, and all of a sudden we're messing with people's lives and things like that. And so we wanted to have a little more control of what we said from then on. But the Chinese were very interested in our evaluations, and they spent a lot of time listening, asking, and it was a very interesting six weeks.

Petershagen: And it was just that one trip?

Manderscheid: Yes. Now, the Bureau did have some of the people, some people out of Denver did go back again for a second and possibly a third trip, I'm not sure. But they were well past the planning stage, and even while I was there—they did their planning very well. The only thing they didn't do was include economics in their planning. And this is one of the recommendations that we made, but their planning itself was very good. And so there wasn't a real need for somebody in planning to go back there and help them plan, except maybe to combine and coordinate so that a lot of them are multipurpose rather than a whole bunch of single-purpose issues stacked up on top of each other.

Petershagen: Can you explain why they were light on economic considerations in their plans?

Manderscheid: No, I can't really expound on that. I would say that economics was not a consideration in a Communist regime so much, but I'm not an expert on that. If you need to do something, you did it, and you put money up to get it done. You can only do that so long until you run out of all your financial resources, as Russia did, in meeting its people needs and its defense needs. Finally went bankrupt.

Petershagen: Another foreign country you must have interfaced with quite a bit—certainly not as foreign to our society as China is, I would think—is Canada and the Province of British Columbia, while you were working in the Northwest, associated with the Columbia River. Did they participate in the activities you were involved in?

Pacific Northwest Studies

Manderscheid: No, there were already compacts or things of that nature, of agreements of that nature, with Canada. And so we never bumped heads. They did the developing up north and they did it within Canada, but there was a lot of negotiations, because they were selling their electricity down in the United States and they were releasing certain amounts of water and so on. And so we never interfaced with the Canadians at all.

Petershagen: So all those rules were already established (Manderscheid: Yes.) and you

just had to "play within the rules," so to speak.

Manderscheid: Yes. We knew what the water was, where there was rivers coming across. The only place that I can think of that that occurred was in the Okanogan River in Central Washington. While working in Spokane, we did have a study in the Okanogan, the O-T something-or-other. I can't even remember it. But we had the water and there was some interface at that time, but I wasn't involved in it.

Petershagen: I see. Now let's jump back into California. (Manderscheid: Okay.) Let me say "Auburn." What sort of feelings does that bring about for you?

Auburn Dam

Manderscheid: Well, one of my assignments, when I was working in the Delta Division, the Auburn Dam⁶ was just getting started. So, I didn't interface with that until I came back. And in '76 I spent two weeks at Auburn as a part of this governmental

⁶ Auburn Dam was to be the primary feature of the Auburn-Folsom Unit. Sited on the North Fork of the American River near Auburn, California, the dam was designed as a concrete arch structure 700 feet high with a crest length of 4,000 feet. For more information see, Jedediah S. Rogers, "Auburn Dam Auburn Folsom Unit American River Division Central Valley Project," Denver: Bureau of Reclamation History Program, 2009, www.usbr.gov/history/ProjectHistories/Central%20Valley%20Project-Auburn%20Dam%20D2.pdf.

training assignment that I was on, and I worked in a number of offices up there at Auburn. I wanted to get back into construction when I was there, because I really enjoyed working in construction.

But Auburn, in my estimation, should have been built many years ago. Each day that you wait, then it becomes far more expensive. I sat in on a lawsuit with environmental groups, Sierra Club, Friends of the Earth, and others, down in . . . Well, I guess it wasn't on Auburn then, but it was on some other projects. At any rate, Auburn solves an awful lot of problems for downstream water needs and so on. The yield of Auburn is only 318,000 acre feet. It's not a big water yield, but it has a lot of other benefits—power, flood control, fisheries, recreation, and instream flows—that it should have been built.

Petershagen: When you were actually at Auburn, what was going on then?

Manderscheid: They were building the footings, in essence. They were blasting and putting concrete right where the dam was to go, and that's still up in there. And it was shortly after that period of time that it was shut down that I was there. I think I was there in August, and it was shut down, in essence, a month or two after that.

Petershagen: So what *you* saw with your very own eyes was a pretty high level of activity then.

Manderscheid: Yes. At that point in time there were quite a few construction workers there. There was a lot of concrete, a lot of blasting, excavating, get down to bedrock, field surveys, and building highways and roadways and the bridge, and so on. So there was a big contingent of people up there. And that was in 1976.

Petershagen: So that whole scenario must have had a big impact on a town like Auburn.
(Manderscheid: Oh yeah.) To have that level of activity build up, I'm sure, was a major economic boon and so forth, and then to have it stop all of a sudden, I'm sure was probably felt by the community too.

Manderscheid: Yeah, but I think it was more a blip on the horizon. What it did was make people more aware of Auburn and what it had to offer to live there. And I haven't seen Auburn really suffer, unless it was a short blip. But they were growing, and still growing.

Petershagen: It is an interesting city. This might be a good opportunity to stop and change the tape once again, Bill.

Manderscheid: Alright.

END OF SIDE B, TAPE 1.

BEGINNING OF SIDE A, TAPE 2.

Petershagen: This continues the interview of Bill Manderscheid. This is Tape 2, Side A.

Bill, we've talked about your career a large number of places in the West, but maybe you could talk a little bit about some of your experiences in Washington, and I think I'm most interested in—if you can do it—try to compare and contrast a little bit, water issues in Washington with those in California.

Puget Sound Studies

Manderscheid: Okay, the initial studies I did in Washington on the Puget Sound and adjacent waters, it was a time in the 60s that the federal government and the state governments were real interested in getting a handle on water resources that they had that were available throughout the U.S. Then also to get a feel for the type of development that would be projected to use those water resources along with the population infusions and so on. And they wanted to do a fifty-year, up to the year 2020, time period to analyze what was going to happen—both short-range and long-range planning. And so to do this, they established what they called a Type I and Type II study. The Puget Sound and adjacent waters was a Type II study, and it differed from the Type I study in that most of the projects

and things that we came up with were to be at the feasibility level, and they could almost go into Congress with them to get funded and build some of these projects. Type I study, the Columbia [River] and North Pacific Study is what I mentioned I worked on also, after the Puget Sound Study, and it was just a reconnaissance level study.

Now in the Puget Sound and adjacent water studies, they were broken down into twelve river basins, and as the study went along, I joined it when it was about a third of the way undertaken and I was chief of the irrigation committee, and also chairman of the irrigation committee, and they had various committees: irrigation, flood control, power, recreation, and so on. Then I was also a co-chairman of the plan formulation committee which took all of the information generated by each of these other subcommittees and blended those into a plan and going forward we met with the local planning fathers and held meetings with them and supervisors and directors of planning and so on, to apprise them of our planning efforts.

At that time there wasn't very much interest in any of the issues that we were trying to bring up. (brief break) And so the people on the plan formulation committee, I was co-chairman representing Department of Interior, and another fellow was the other co-chairman

representing the Army Corps of Engineers. And since the Corps of Engineers had a big effort and a big program in the Northwest, they were involved in water resources. Department of Agriculture, to a lesser extent, and the state of Washington also. And so we developed the plans and we got them in draft form and we had a document about two inches thick. And so we took these out to the people and the task force which is a level above us, of course, and these were all agency heads and so on, within the state. They were the head of our office, representing Interior, and the head of the Corps of Engineers' office, the civilian head, and so on. And they represented the task force.

Well, when they took the plans out and we scheduled a number of meetings, all of the local political people in the first meeting came and set on the podium. When we started presenting the plans, all hell broke loose. We were totally caught by surprise. The environmental movement had got thrust in there, and the local people thought we were trying to ram something down their throat. They were very loud and stamping on the floor and cheering anybody that brought up a vote of protest. The local political people sitting up on the platform excused themselves and got the hell out of there, because they didn't want any part of that

scenario, and they were surprised at the same time.

Well, as we went around the Puget Sound area, a lot of the newspapers, of course, picked up on this, that it was something new. And so one place we had a real hard time making our presentation, and the people would get real irate. And so we did finish the study and we calmed a lot of fears with the study. It was published and died a normal death, I guess. All of the reports and all the money spent went up on the shelf and nothing was ever done, that I'm aware of. And the parts that we had identified and things that the local people liked, they had a little life.

Columbia-North Pacific Study

So we moved on down to the Columbia-North Pacific Study and our study center was in out of Vancouver, Washington, and we had a study center there, and they had a paid staff. And then the agency people then represented the technical input. But the paid staff were most of the people that had been involved in the Puget Sound Study, so they directed this other effort all along. It wasn't just spend time here now and there now—it was a full-time effort, and they got a lot more response, met a lot more people that were the movers and shakers,

and met with the press and did a lot of things that helped the study along.

Well, it was a pretty broad-based study: it covered Montana and Idaho, all the drainage of the Columbia [River], which included the Snake River and many of the rivers in Washington. And by the time we had completed the study, there were, oh, fifteen volumes plus a plan formulation document. I think the staff was retained up until ten years later, and then I think it was gradually phased out.

Western Water Plan

The government no longer had an interest in doing . . . They'd got a handle on their water resources and they were no longer really interested in continuing this effort. And it was about the same time that the Columbia-North Pacific Study was ongoing, the Western Water Plan got underway. And this was to develop an overall scenario plan to develop the water resources and to move them here and there if there was a need to, to balance the development in the West. And then to get some idea on how much water there was available to develop. And Wally Christianson headed this up. This is the fellow that I mentioned that I first started to work with. And that effort lasted a few years—this is in the mid-70s and the same environmental movement was getting

started throughout the country, and anyway, budgeting, Vietnam War, whatever, just pretty well killed it off. And so, I think it was a combination of all of those that stopped that program and it was no longer funded, and so everybody went home and went to their agencies and did other things.

So those are the major studies I was involved in, in the Northwest. Then after I became Chief of the Engineering Surveys Division, it was more local project planning, rather than broad geographic basins, which I was involved in. And the other broad geographic basins were very interesting because you could get into the whole concept of what was going to happen, or what *can* happen in the future, and what was projected. I really enjoyed doing these type of studies.

Petershagen: In your mind, should a major basin kind of a project be run locally, or is it better run by something like the Bureau of Reclamation? Or let me even turn the question around and ask it this way: A few of the Bureau people I've spoken with have indicated that they thought that maybe something like the Central Valley Project could better be run by California or a more local agency, rather than people in Washington and Denver.

Turning Control of the CVP to Local Agencies

Manderscheid: Well, I think I can agree with that, if it had happened some time ago. And the concept is more correct for California, if California had been able to do the development they wanted to do back in the 30s, and it might well have been a good project. But even now I think it would behoove the state to be able to take over, but there's so many contracts, restrictions, and requirements of the federal government, that the state government could never be effective in running it. You got Shasta Dam⁷ up there that cost \$425 million. In today's dollars if you had to build that it would probably be in the order of about four *billion* dollars to build a Shasta. And so the price is pretty much prohibitive.

It just shows how water development has cost-wise gone up, and for the state to take over the federal project now, it's at a point where it's not really a money-maker. There's a lot of subsidies that go on, and it's not the agricultural subsidies, it's power and repayment. But the repayment that you have to make to a \$425 million project is pretty small. Of

⁷ A key feature of the Central Valley Project, Shasta Dam is located about nine miles northwest of Redding, California, on the Sacramento River. Built during the seven-year period between 1938 and 1945, the dam is a 602-foot-high concrete gravity dam, which provides flood control, power, and water supply benefits. For more information see, Eric A. Stene, "Shasta Division Central Valley Project," Denver: Bureau of Reclamation History Program, 1996, www.usbr.gov/projects/pdf.php?id=107.

course, this is when a lot of people in California say, "Well, look at today's market. Your forty-dollar water should be a *hundred* and forty dollars." Well, yeah maybe it should in today's market, but what you're doing is repaying your house that you bought forty years ago or fifty years ago—you're just repaying that. You shouldn't take on what it costs to buy a brand new house out here. And so there's a lot of arguments. I think the answer to your question is, probably it would be better for the state to run the Central Valley Project. Now, I don't think it would have been way back then, because the state didn't have that kind of money.

Petershagen: We've already talked about Auburn and how you feel about that. Are there any other possible areas of the state that you can think of that might be looked for, for water resources development?

Possible Future Development

Manderscheid: No, the development that you need now is to generate a lot of water supply, is really not available anymore. There is some real opportunity to gain additional water supplies through—and these would all be supplemental or taking care of some of the overages that there are out there. There are some water rights settlements and some other water rights—there's quite

a bit of water that's not being used. Or you could rehab [rehabilitate] systems.

For instance, one study I was involved in is down in the San Joaquin Valley, one district down there had a very excellent water right, and they have a very leaky system. And they want to upgrade it, but it costs a lot because it goes across nonproductive land to get to the productive land, so it's a very expensive proposition. And so they say, in essence, "If we go through and rehab this and we save 50,000 acre feet of water, then we want to take this 50,000 acre foot of water and sell it to other water users in need." Well, the state of California, not necessarily the Department of Water Resources, but the water right people in the state and others say, "Well, no, because it's state law that says you can't waste water, and if you've got wasted water out there, then you need to go fix up your system." And these guys say, "Baloney! We've got a water right to do it, and right now we got a leaky system that gets down here, it's going into the ground, it's all dirt canals and things like that. We're authorized to do it. To hell with them, if we don't get any return for it."

And so these type of projects are out there, and they can be developed. There's groundwater that can be developed in Northern California. We had an estimate,

like there's 100 million acre feet of groundwater in Sacramento Valley, under the Sacramento Valley. But it's going to take money to tap it, because you've got to go down somewhere like 11,000 feet to get into real good usable water. But Sacramento Valley landowners say, "Hey, we got a good surface water supply, we've got a good contract with the Bureau of Reclamation, and we've got a right to surface water, so why should we develop groundwater?" But at the same time they're saying, "We want to develop groundwater to sell, to sell to the Delta."

And the state and the Bureau are having a hard time getting along to do that. And so I think they are making progress in that area, but it's a number of small projects, there's no big projects. And now with this latest Act, C-V-P [Central Valley Project] Reauthorization Act or whatever they call it, where they're providing all this water for fish and other uses.

Petershagen: I think you're talking about the C-V-P Improvement Act.⁸

⁸ Public Law 102-575, the Reclamation Projects Authorization and Adjustment Act of 1992, became law October 30, 1992. The act contained numerous titles, each of which is given a separate name. Title 34 of the act is the Central Valley Project Improvement Act or CVPIA. The act's purpose is to: protect, restore, and enhance fish and wildlife habitats in the Central Valley and Trinity River basin; address project impacts on fish and wildlife; improve project operational
(continued...)

Manderscheid: The improvement act, yeah, where they're going to get additional water to make up for the water that they take away from farmers, what they're probably going to end up doing is taking away from farmers that have to give to farmers that *don't* have, ala Sacramento Valley versus San Joaquin Valley. So it's not as interesting to me now as when it was thirty, forty years ago.

Future of the Bureau of Reclamation

Petershagen: My son is a mechanical engineering major. What advice would you give to him as far as looking ahead to a career? Would you advise him to look at the Bureau of Reclamation?

Manderscheid: No, I don't see the Bureau . . . Just due to the administrative and legislative laws and things that have been passed, Congressman [George] Miller's outlook at the Bureau of Reclamation and others, I don't see the Bureau as an organization that you would want to get involved in to make a career out of, because it's not growing, it's not doing things, it doesn't inspire anything out of you. It's more just kind of a "mark time" group right now. All of the politicians and administrators

8(...continued)

flexibility; increase expanded use of voluntary water transfers and improve water conservation; contribute to California's efforts to protect Sacramento/San Joaquin Delta; achieve reasonable balances among competing demands for use of Central Valley Project Water.

try to chip away and take pieces of it for their own agendas—and in my mind, not necessarily for the good of the country. And maybe it's time that the Bureau—something else came along. I *do* know that the Bureau is trying very hard to develop a niche for itself in our present-day society. I think they would like to go nationwide. I do know that the infrastructure of the nation is in trouble—infrastructure as far as water resource. But whether that's a program for Reclamation or not, I don't . . .

Petershagen: Well, there certainly is the expertise there to tap.

Manderscheid: Well, yeah. I just played golf with one of the fellows that I hired back in the late 70s and he's in planning. And he's the only person in General Investigations Branch that was there when I was there. And I had a lot of young people that I'd brought along. And there's only a handful of people, and we're only talking just a few years [since I] left there, and everybody is new. And they are becoming contract overseers. They don't really do a lot of planning, design, or cost estimating or things that we did. And it's a different ball game—very little real design and things going on, to make somebody really—you know, wouldn't want to make the Bureau a career. Right now, really, there's more people than there are jobs for graduates, and even

technical people. So whenever there's a position open up, people grab it—not because it's a career thing that you really want to get into, but because it's a job.

Petershagen: In looking back on our careers, most of us can identify usually one person, sometimes two or three, that we might consider was a mentor to our career. Could you name such an individual?

Career Mentors

Manderscheid: Yes. I would say, number one, Wally Christianson.

Petershagen: You ripped the very answer out of my mouth! I think that's the name you've mentioned the most.

Manderscheid: Yes. And Archie Hansen. And then there's been some other people that I've worked for that I really liked working with: Mike Catino⁹ is one. (pause) I'm having a hard time with some of the names now, but probably the folks that

9 Michael A. Catino served as regional director of Reclamation's Mid-Pacific Region from 1981 to 1983. Mr. Catino also participated in Reclamation's oral history program. See, Mike Catino, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, and Donald B. Seney, both of the Bureau of Reclamation, from 1994 to 1995, in Sacramento, California, edited by Brit Allan Storey, 2011, www.usbr.gov/history/oralhist.html.

had the most to do that I worked with, Archie Hansen and Wally Christianson. One other person, I can't think of his name. Anyway, he just left Washington, retired out of Washington.

Petershagen: Are there things that we should have talked about that I haven't brought up yet?

Changes within Reclamation

Manderscheid: No, I think the time that I was planning officer or some real times of extreme . . . When I came back to the Bureau for '75 to '85 were extreme periods of change going on in the Bureau, with them going on in the budget, going on in the planning, operation, all phases of the Bureau were rapidly changing, and there were some projects that water rights was something that was just—I shouldn't say "bookkeeping operation"—but it wasn't a big thing. *It* came into play. Operations came into play, and planning. And then we had a lot on the political scene where we had the land for people thing that went all the way back to Washington. I served on San Luis . . . something or other. Anyway, we went back to Washington two or three times and made presentations on.

Kesterson

And then we had some drainage problems. Kesterson Reservoir,¹⁰ which I was in charge of, was under me. But there were a lot of programs related to it—fisheries, environmental, and so on—who we had agencies taking different positions—agencies within Interior.

Petershagen: Let me interrupt you. I'm sorry, but the tape's going to expire on us here.

END OF SIDE A, TAPE 2.
BEGINNING OF SIDE B, TAPE 2.

Petershagen: This continues the interview of Bill Manderscheid. This is Tape 2, Side B. Bill, you were talking about Kesterson as we ended the first side of the tape.

Manderscheid: Yes, the drainage program was in San Joaquin Valley—started way back in the early 60s as a part of the authorization of

10 "Completed in 1971 by the Bureau of Reclamation, Kesterson included 12 evaporation ponds for irrigation drainage water. The reservoir, a part of the San Luis National Wildlife Refuge, was an important stopping point for waterfowl. In the 1960s officials proposed a 290-mile drainage canal to the ocean known as the San Luis Drain. Only 85 miles were completed, however, and work on the drain halted in 1986 after scientists discovered bird deformities due to drainage at Kesterson." For more information, see Water Education Foundation, "Kesterson Reservoir," www.watereducation.org/aquapedia/kesterson-reservoir. (Accessed 5/2016)

the San Luis Unit.¹¹ And Kesterson Reservoir became a terminal reservoir for the San Luis Drain. It was meant to be not a terminal reservoir, but it was just a stopping-off place until they could take the drainage effluent on up to the Delta. But as with the Peripheral Canal, the drainage program hit a lot of trouble in the mid-70s just because of public awareness of water resources development and so on, what was happening.

And Kesterson Reservoir became a cry of the fishery people and others for environmental awareness. And the thing about Kesterson was biologists went down and found a number of ducks that had been malformed, and he put them on red velvet and they took pictures of them. And of course this hit the national news and made this a big issue and it got all blown out of proportion in my mind. And as a result, the government ended up spending some \$30-50 million just to get rid of Kesterson which didn't really

11 The San Luis Unit is part of both the federal Central Valley Project and the California State Water Project. Authorized by the San Luis Act in June 1960 (Public Law 86-488), it is jointly operated by the Bureau of Reclamation and the California Department of Water Resources. For more information see, Robert Autobee, "San Luis Unit West San Joaquin Division Central Valley Project," Denver: Bureau of Reclamation History Program, www.usbr.gov/projects/pdf.php?id=109.

resolve any problem except that it took care of that issue.

But in the meantime there was a lot of divergent personalities and agency people doing different things. I chaired one committee, I do remember a fellow from the state asking me, "The other Interior members on the committee," he said, "doesn't the secretary set the guidelines and the policy for them?" And of course I knew what he was talking about, because Fish and Wildlife Service was taking a different position on Kesterson than the secretary was, and the same way with Bureau of Land Management and some others. And so I brought out that point, and Fish and Wildlife Service says they'll do what they think is best. Anyway, that went upstairs pretty fast. (Petershagen: (laughing) I'm sure!) Anyway, as a result of all that, there became a lot of divergent opinions that affect the water resource development in California.

Now, Fish and Wildlife Service and the Bureau people have a hard time getting along at the working level. You get up above that into the policy makers, and they can see pretty well eye-to-eye, but they got to stick by their people and programs. It's a tough mish-mash, and I

would hate to be working on the C-V-P Improvement Act at this point in time.

Petershagen: How did Kesterson become a wildlife refuge?

Manderscheid: Well, I think . . . I don't know exactly, but it was an agreement within the Secretary's Office to do that, and then how it actually came about, I'm not really certain. But it was sort of an agreement in the Secretary's Office through Fish and Wildlife and others.

Petershagen: Is it fair to say that from the Bureau's perspective it was never intended to develop Kesterson as a wildlife refuge?

Manderscheid: No. No, and like a lot of the issues, they found twelve ducks down there that they found that were bothered by the drainwater, that the SE selenium was going into the waterfowl and deforming their young and the eggs and so on. But it was more related to shore birds than it was to ducks. The thing that you never hear is that there was a million ducks around Kesterson Reservoir and in that area down there that died of cholera at the same time all of this time was going on about the selenium scare. But nobody ever talked about that, you know, and they're talking about deaths of all these birds.

We put together, early on when it was first found out in '83, we put together a national meeting where we had doctors from back East, M-I-T [Massachusetts Institute of Technology] biologists and people that had a background in all of this. And the gist of that meeting was that eggs are not going to be harmed, that the ducks generally fly in and they're there resting for just a few days, and if they drink selenium water, in the time that they were there, it's not going to hurt them. And then there were others that had differing opinions. But the gist of the whole meeting was, technically, Kesterson wasn't going to be as bad to the birds as was being drummed up. But that never got anywhere, the minutes of that meeting.

Petershagen: You said that one of the other areas you wanted to talk about especially was the Trinity [River]. Can we jump up there now?

Trinity River

Manderscheid: Yeah. We had an ongoing program in the Trinity. When I worked in the Trinity, I can remember when they were building the dam, that the river ran brown down below it. It was like any of the Midwest rivers or the rivers in Canada and – they were really brown, heavy laden with

silt—which is uncommon for the Trinity. And it had the silt up the river and so on. But after the dam was built and the flows were minimal, there did turn out to be considerable damage to the fishery—by that I mean in the numbers of fish returning, and steelhead particularly. And over the years, then, we got a program going to try and rehab Trinity River to bring it back to where it was in the numbers of fish. And to do that, we had a number of years in which we had a task force belonging.

Of course from my viewpoint and perspective, a number of the people on the task force were very anti-Bureau, and maybe [due to] their backgrounds they had a right to be. But most of all, the people on the task force were really trying to do something to get the river back to where it was and come up with programs. And that notwithstanding a few personalities and a few clashes and everything, that program did get underway, and there was work on Trinity. I'm not sure if it's still continuing, but it was just a few years ago.

And there are more fish returning now, and there is a problem down at the mouth of the river with the Indian fishery, who are continuing to totally expand their need for fish. And now it's being viewed

as they need to catch and sell fish to maintain their standard of living, rather than just catch enough fish to maintain their families' standard of living. So that problem isn't being looked at by the politicians, either Washington or elsewhere. And those kind of issues are causing a real problem up and down the entire West Coast of America, where the Indian fishery is being given an expanded license over the commercial and sport fishing. And as a result of *all* of them, and no one person is any better than the other, that the fishery stocks are declining. And that can be attributed to many things, and Reclamation's program may have hindered development in the Sacramento [River] basin, but up and down Alaska where there's no development, no people, no *anything* in any strength, fishery numbers are declining at the same rate they are down here. And so you can't say it's just due to dams and things of that nature and Reclamation's program. It's happening all over, there's other factors.

Petershagen: I've certainly seen some reports of years before the C-V-P was even begun, when the Sacramento River essentially dried up, and you wonder if the fish stocks, the species, were able to survive one or two years like that, and recover, why they

can't last now that we've got constant flows in the rivers.

California Fisheries

Manderscheid: Yes, we did a study on the San Joaquin [River], and according to old Fish and Wildlife records, there was something like 120,000 fish going up the San Joaquin into the Stanislaus River. And now they're dwindled down, in well the Stanislaus and some others, have dwindled down to a few thousand. So we had a contract—this is after I left the Bureau—but we had a contract with the Bureau to look into why and do a history and make some recommendations on how they could rehab what they need to do. Well, one of the things that we found out is that [U.S.] Fish and Wildlife, [California] Fish and Game, didn't have at that time—and this is 1988, '87, somewhere in there—did not have an overall plan for fishery in the San Joaquin River drainage.

They had a two-mile stretch of the river, they had a twenty-mile stretch of one of the side rivers, they had a plan for, but it was only for that river. So when we put this in the report, well, I tell you, Fish and Game came unglued, and so did Fish and Wildlife, because they were making proponents that they have everything in

hand, the answers. Anyway, that report has not seen the light of day since we put it out, and Fish and Game just didn't have an responses to it, but that report has never went past the draft stage, so it died.

Petershagen: Let me just point out on the tape here that I think whenever you mentioned Fish and Game you're talking about the State Department of Fish and Game, and when you say Fish and Wildlife you're talking about the U.S. Fish and Wildlife Service, correct?

Manderscheid: That's correct. Sometimes I use them in the same breath, and I'm not correcting myself—it's just that I'm using both of them.

Petershagen: Alright, I think we're at the end of *my* agenda, is there anything else that you want to bring up?

Manderscheid: I can't think of anything.

Petershagen: Okay. Well then just let me say thank you very much for a delightful afternoon, and for participating in the Oral History Program. And one final thing I have to do before we close is to have you acknowledge once again that we tape recorded this with your permission and that you did deed this over to the United States.

Manderscheid: Exactly. I have given my full permission and cooperation on this of my own free will.

Petershagen: Well, thanks for much for the interview, and for the cookies, Bill.

END OF SIDE 2, TAPE 2.
END OF INTERVIEW